

**REMARKS:**

Claims 1-53 are currently pending in the application.

Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,996,589 to Jayaram et al. ("*Jayaram*") in view of U.S. Patent No. 7,149,746 to Fagin et al. ("*Fagin*").

Claims 16-17, 33-34, 50-51, and 53 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of U.S. Patent Publication No. 2001/0008023 to Bond et al. (hereinafter "*Bond*").

Claims 3, 20, and 37 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of U.S. Publication No. 2002/0046301 to Shannon et al. ("*Shannon*").

Claims 4-6, 8, 21-23, 25, 38-40 and 42 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of U.S. Patent No. 6,381,709 to Casagrande et al. ("*Casagrande*").

Claims 13-15, 30-32, and 47-49 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of U.S. Publication No. 2003/0233249 to Walsh et al. ("*Walsh*").

Claims 7, 9, 24, 26, 41, and 43 stand rejected under 35 U.S.C. § 103(a) over *Jayaram*, *Fagin* and *Casagrande* in view of *Walsh*.

Applicants note with thanks the Examiner's response of 18 May 2010 and the Advisory Action of 4 August 2010. Applicants further note with thanks the Examiner's statement in the Advisory Action of 4 August 2010, that Applicants amendments in the response pursuant to 37 C.F.R. § 1.116 filed 19 July 2010 raise new issues that would require further consideration and/or search.

Applicants respectfully submit that all of Applicants arguments and amendments are without prejudice or disclaimer. In addition, Applicants have merely discussed example distinctions from the cited prior art. Other distinctions may exist, and as such, Applicants reserve the right to discuss these additional distinctions in a future Response or on Appeal, if appropriate. Applicants further respectfully submit that by not responding to additional statements made by the Examiner,

Applicants do not acquiesce to the Examiner's additional statements. The example distinctions discussed by Applicants are considered sufficient to overcome the Examiner's rejections. In addition, Applicants reserve the right to pursue broader claims in this Application or through a continuation patent application. No new matter has been added.

## **I. Support for Current Claim Amendments**

In compliance with 35 U.S.C. § 112, Applicants respectfully submit that support for Applicants' current claim amendments may be found in at least the following portions of Applicants' specification, as published, provided below for the Examiner's convenience:

[0019] *The decision regarding whether to provide a programmatic interface 16 or a relational interface 18 depends on particular needs.* For example, if relational data store 12 uses flat files for importing data, then *the decision between a target interface 16b and a relational interface 18 may depend on the amount of processing performed* on the flat files before they are stored in relational data store 12. *If relatively little processing is needed and performance is critical, then the application developer may choose to implement a relational interface 18 to directly expose relational data store 12.* However, *if relatively significant validation or other processing is needed and performance is not as critical, then the application developer may choose to expose relational data store 12 using a target interface 16b.* (Emphasis added).

## **II. Rejections Under 35 U.S.C. § 103(a)**

Claims 1, 2, 10-12, 18, 19, 27-29, 35, 36, 44-46, and 52 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* in view of *Fagin*. Claims 16-17, 33-34, 50-51, and 53 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of *Bond*. Claims 3, 20, and 37, stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of *Shannon*. Claims 4-6, 21-23, 25, 38-40 and 42 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of *Casagrande*. Claims 13-15, 30-32, and 47-49 stand rejected under 35 U.S.C. § 103(a) over *Jayaram* and *Fagin* in view of *Walsh*. Claims 7, 9, 24, 26, 41, and 43 stand rejected under 35 U.S.C. § 103(a) over *Jayaram*, *Fagin* and *Casagrande* in view of *Walsh*. Applicants respectfully submit that Claims 1-53 in their current, amended form contain unique and novel limitations that are not disclosed by *Jayaram*, *Fagin*, *Bond*, *Shannon*, *Casagrande* and *Walsh*, either individually or in combination. Thus, Applicant respectfully traverses the Examiner's obviousness rejection under 35 U.S.C. §

103(a) over the proposed combination of *Jayaram, Fagin, Bond, Shannon, Casagrande* and *Walsh*, either individually or in combination.

In rejecting Claim 1, the Examiner states the following:

Jayaram does not teach a plurality of relational interfaces used as alternatives. Fagin teaches a plurality of relational interfaces used as alternatives to the plurality of programmatic source interfaces or the plurality of programmatic target interfaces (col. 4, lines 7-29; col. 13, lines 5-22).

(18 May 2010 Final Office Action, page 4). Applicants thank the Examiner for noting that *Jayaram* fails to disclose “***a plurality of relational interfaces used as alternatives to the plurality of programmatic source interfaces or the plurality of programmatic target interfaces,***” as required by Applicants’ Claim 1. However, Applicants respectfully submit that none of the cited references disclose “***a plurality of relational interfaces used as alternatives*** to the plurality of programmatic source interfaces or the plurality of programmatic target interfaces ***based on file processing time and one or more performance requirements,***” as required by Claim 1, as amended. For further clarification, Applicants respectfully direct the Examiner’s attention to column 12, line 60 through column 13, line 24 of *Fagin*, on which the Examiner relies, provided below:

***Illustrations help a user understand mappings,*** understand differences between mappings, and identify shortcomings or flaws in a mapping. ***System 10 enables a user to act on the knowledge gained through illustrations to extend or refine a mapping*** by providing to the user a suite of operators for manipulating mapping. These operators permit users to easily and effectively make use of the sophisticated query reasoning and query management knowledge encapsulated within system 10. By nature, the process of creating complex mappings is incremental. System 10 allows the user to easily invoke these operators and quickly discern their results.

After examining an illustration of a mapping, ***a user may invoke a mapping modification operator which creates a new mapping or set of new alternative mappings. Each new mapping is illustrated by a set of examples that are derived naturally from the current example presented by system 10.*** A few of the operators provided by system 10 are presented in the following description. The mapping modification operators are grouped by their effect on the mapping. First, correspondence operators permit a user to change the value correspondences. ***As the user adds new value correspondences to a mapping, system 10 determines a set of alternate mappings and helps the user decide among them using illustrations.*** Second, data trimming operators modify the source 205 and target 210 filters of a mapping. These operators change the set of

source 205 and target 210 tuples included in the mapping rather than the query graph of a mapping. Data trimming operators are illustrated by system 10 using positive and negative examples so a user can see the effect of the different filters. (Emphasis added).

As shown above, the portion of *Fagin* relied on by the Examiner merely discloses, among other things, a user making modifications which result in alternate mappings, each of which is illustrated by a set of examples. By contrast, Applicants' Claim 1, as amended, requires "***a plurality of relational interfaces used as alternatives*** to the plurality of programmatic source interfaces or the plurality of programmatic target interfaces ***based on file processing time and one or more performance requirements***." *Fagin* is silent, and thus, fails to disclose any considerations that are used in determining whether a relational interface is used as an alternative to a programmatic source or target interface and thus, fails to expressly or inherently disclose using a plurality of relational interfaces as alternatives to programmatic source or target interfaces ***based on file processing time and one or more performance requirements***.

In addition, the portion of *Fagin* relied on by the Examiner is silent, and thus, fails to disclose programmatic source or target interfaces in the first place and thus, also fails to disclose the above-referenced elements of Applicants' claims. Furthermore, the portion of *Fagin* relied on by the Examiner is silent, and thus, fails to disclose any detail as to how ***a set of alternate mappings are determined*** and thus, also fails to disclose the above-referenced elements of Applicants' claims. In addition, what *Fagin* calls ***alternate mappings*** is simply an abstraction that describes a possible process, which "may" be performed by some undefined component of the *Fagin* system. Applicants respectfully submit that this is not analogous to using a plurality of relational interfaces as alternatives to programmatic source or target interfaces ***based on file processing time and one or more performance requirements***, as required by Claim 1, as amended. More simply stated ***a set of alternate mappings*** as disclosed in *Fagin* does not equate to ***a plurality of relational interfaces used as alternatives*** to the plurality of programmatic source interfaces or the plurality of programmatic target interfaces as required by Claim 1, as amended.

Accordingly, *Fagin* thus fails to disclose "***a plurality of relational interfaces used as alternatives*** to the plurality of programmatic source interfaces or the plurality of programmatic

target interfaces *based on file processing time and one or more performance requirements*,” as required by Applicants’ claims, as amended.

Similarly, *Jayaram, Bond, Shannon, Casagrande, and Walsh*, whether taken individually or in combination also fail to disclose this element of Claim 1, as amended. Furthermore, Applicants respectfully submit that there is no teaching or suggestion in any of the cited references to render obvious Applicants’ claims. Accordingly, Applicants respectfully submit that Claims 1-53, as amended are not rendered obvious by *Jayaram, Fagin, Bond, Shannon, Casagrande, and Walsh*, whether taken individually or in combination and therefore respectfully request that the Examiner’s rejections under 35 U.S.C. §103(a) be withdrawn.

**III. The Office Action Fails to Properly Establish a *Prima Facie* case of Obvious over the Proposed *Jayaram- Fagin-Bond-Shannon-Casagrande-Walsh* Combination According to the UPSTO Examination Guidelines**

Applicants respectfully submit that the Office Action fails to properly establish a *prima facie* case of obviousness based on the proposed combination of *Jayaram, Bond, Shannon, Casagrande, and Walsh*, either individually or in combination, and in particular, the Office Action fails to establish a *prima facie* case of obviousness based on the “Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in *KSR International Co. v. Teleflex Inc.*” (the “Guidelines”).

As reiterated by the Supreme Court in *KSR International Co. v. Teleflex Inc.* (*KSR*), the framework for the objective analysis for determining obviousness under 35 U.S.C. 103 is stated in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)). Obviousness is a question of law based on underlying factual inquiries. These factual inquiries enunciated by the Court are as follows:

- (1) Determining the scope and content of the prior art;
- (2) Ascertaining the differences between the claimed invention and the prior art; and
- (3) Resolving the level of ordinary skill in the pertinent art.

(Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). Objective evidence relevant to the issue of obviousness must be evaluated by Office personnel. (383 U.S. 17–18, 148 USPQ 467 (1966)). As

stated by the Supreme Court in *KSR*, “While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.” (*KSR*, 550 U.S. at \_\_\_, 82 USPQ2d at 1391).

However, it is important to note that the Guidelines require that Office personnel “***ensure that the written record includes findings of fact*** concerning the state of the art and the teachings of the references applied. (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). In addition, the Guidelines remind Office personnel that the “***factual findings made by Office personnel are the necessary underpinnings to establish obviousness.***” (*id.*). Further, “***Office personnel must provide an explanation to support an obviousness rejection*** under 35 U.S.C. 103. (*id.*). In fact, “35 U.S.C. 132 requires that the applicant be notified of the reasons for the rejection of the claim so that he or she can decide how best to proceed” and “clearly setting forth findings of fact and the rationale(s) to support a rejection in an Office action leads to the prompt resolution of issues pertinent to patentability.” (*id.*).

With respect to the subject application, the Office Action has not shown the ***factual findings necessary to establish obviousness*** or even ***an explanation to support the obviousness rejection*** based on the proposed combination of *Jayaram, Fagin, Bond, Shannon, Casagrande, and Walsh*. The Office Action merely states that “it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of alternative relational interfaces of Fagin’s system to improve similar method of interfacing systems for data transfer in Jayaram’s system in the same way.” (18 May 2010 Final Office Action, page 4). Applicants respectfully disagree and respectfully submit that the Examiner’s conclusory statement is not sufficient to establish the ***factual findings necessary to establish obviousness*** and is not a sufficient ***explanation to support the obviousness rejection*** based on the proposed combination of *Jayaram, Fagin, Bond, Shannon, Casagrande, and Walsh*.

The Guidelines further provide guidance to Office personnel in “determining the scope and content of the prior art” such as, for example, “Office personnel must first obtain a thorough understanding of the invention disclosed and claimed in the application.” (Notice, 72 Fed. Reg. 57527 (Oct. 10, 2007)). The scope of the claimed invention must be clearly determined by giving the claims the “broadest reasonable interpretation consistent with the specification.” (*See Phillips*

v. AWH Corp., 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) and MPEP § 2111.). In addition, the Guidelines state that any “**obviousness rejection should include**, either explicitly or implicitly in view of the prior art applied, **an indication of the level of ordinary skill.**” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). With respect to the subject Application, the Office Action has not provided **an indication of the level of ordinary skill.**

The Guidelines still further provide that once the *Graham* factual inquiries are resolved, Office personnel must determine whether the claimed invention would have been obvious to one of ordinary skill in the art. (*Id.*). For example, the Guidelines state that **Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.** (*Id.*). In addition, the Guidelines state that the proper analysis is **whether the claimed invention would have been obvious to one of ordinary skill in the art after consideration of all the facts.** (*Id.* and *See* 35 U.S.C. 103(a)).

With respect to the subject Application, the Office Action has not expressly resolved any of the *Graham* factual inquiries to determine whether Applicants invention would have been obvious to one of ordinary skill in the art. In addition, the Office Action fails to **explain why the difference(s) between the proposed combination of Jayaram, Fagin, Shannon, Casagrande, Walsh, and Applicants’ claimed invention would have been obvious to one of ordinary skill in the art.** The Office Action merely states that “it would allow Jayaram’s system to provide alternative mappings for interfacing transferred data between the systems.” (18 May 2010 Final Office Action, page 4). Applicants respectfully disagree and further respectfully request clarification as to how this statement **explains why the difference(s) between the proposed combination of Jayaram, Fagin, Bond, Shannon, Casagrande, Walsh, and Applicants’ claimed invention would have been obvious to one of ordinary skill in the art.** Applicants further respectfully submit that the Examiner is using the subject Application as a template to formulate reconstructive hindsight, which constitutes impermissible use of hindsight under 35 U.S.C. § 103(a).

The Guidelines yet further state that the “key to supporting any rejection under 35 U.S.C. 103 is the **clear articulation of the reason(s) why the claimed invention would have been obvious.**” (Notice, 72 Fed. Reg. 57528 (Oct. 10, 2007)). In fact, the Supreme Court in *KSR* noted that “**the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.**” (*id.*). The

Court quoting *In re Kahn* (441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)), stated that “[R]ejections on *obviousness cannot be sustained by mere conclusory statements*; instead, there *must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.*” (KSR, 550 U.S. at \_\_\_, 82 USPQ2d at 1396). The Guidelines provide the following seven rationales:

- (A) Combining prior art elements according to known methods to yield predictable results;
- (B) Simple substitution of one known element for another to obtain predictable results;
- (C) Use of known technique to improve similar devices (methods, or products) in the same way;
- (D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;
- (E) “Obvious to try”—choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;
- (F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;
- (G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Applicants respectfully submit that the *Office Action fails to provide any articulation, let alone, clear articulation of the reasons why Applicants’ claimed invention would have been obvious*. For example, the *Examiner has not adequately supported the selection and combination of Jayaram, Fagin, Bond, Shannon, Casagrande, and Walsh to render obvious Applicants’ claimed invention*. The Examiner’s unsupported conclusory statements that “it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use known technique of alternative relational interfaces of Fagin’s system to improve similar method of interfacing systems for data transfer in Jayaram’s system in the same way,” and “to support ETL tool or any type of tools for the data stores,” and “it would allow Jayaram’s system to provide alternative mappings for interfacing transferred data between the systems,” *do not adequately provide clear articulation of the reasons why Applicants’ claimed invention would have been obvious*. (18 May 2010 Final Office Action, page 4). In addition, the Examiner’s unsupported



conclusory statement fails to meet any of the Guidelines rationales to render obvious Applicants claimed invention.

Thus, if the Examiner continues to maintain the obvious rejection based on the proposed combination of *Jayaram, Fagin, Bond, Shannon, Casagrande*, and *Walsh*, Applicants respectfully request that the Examiner provide proper support for the obviousness rejection under 35 U.S.C. 103 as necessitated by the Guidelines.

**IV. Applicants' Claims are Patentable over *Jayaram, Fagin, Bond, Shannon, Casagrande, and Walsh*, Taken Individually or in Combination**

Applicants respectfully submit that as discussed above, Claims 1, 18, 35, 52, and 53 are considered patentably distinguishable over *Jayaram, Fagin, Bond, Shannon, Casagrande*, or *Walsh*, taken individually or in combination. In addition, Applicants respectfully submit that Claim 53 is considered patentably distinguishable over *Jayaram, Fagin, Bond, Shannon, Casagrande*, and *Walsh* for at least the reasons discussed above in connection with Claims 1, 18, 35, 52, and 53.

With respect to dependent Claims 2-17, 19-34, and 36-51: Claims 2-17 depend from Claim 1; Claims 19-34 depend from Claim 18; and Claims 36-51 depend from Claim 35 and are also considered patentably distinguishable over *Jayaram, Fagin, Bond, Shannon, Casagrande*, or *Walsh*, taken individually or in combination. Thus, dependent Claims 2-17, 19-34, and 36-51 are considered to be in condition for allowance for at least the reason of depending from an allowable claim.

**CONCLUSION:**

In view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and early reconsideration and a Notice of Allowance are earnestly solicited.

A Request for Continued Examination (RCE) and an Information Disclosure Statement are being filed electronically herewith to facilitate the processing of this deposit account authorization. **The Director is hereby authorized to charge the \$810.00 RCE fee, to Deposit Account No. 500777.** Although Applicants believe no additional fees are deemed to be necessary; the undersigned hereby authorizes the Director to charge any additional fees which may be required, or credit any overpayments, to **Deposit Account No. 500777.** If an extension of time is necessary for allowing this Response to be timely filed, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) to the extent necessary. Any fee required for such Petition for Extension of Time should be charged to **Deposit Account No. 500777.**

**Please link this application to Customer No. 53184 so that its status may be checked via the PAIR System.**

Respectfully submitted,

18 August 2010  
Date

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